Invention Title: Multi-Axes Tool Compensation – 3D and 5-axis real-time interactive tool compensation inside the CNC machine tool controller.
Inventor: Gary John Corey
Application No. 10/079,309
Inventor's Phone No.: (909) 674-8100

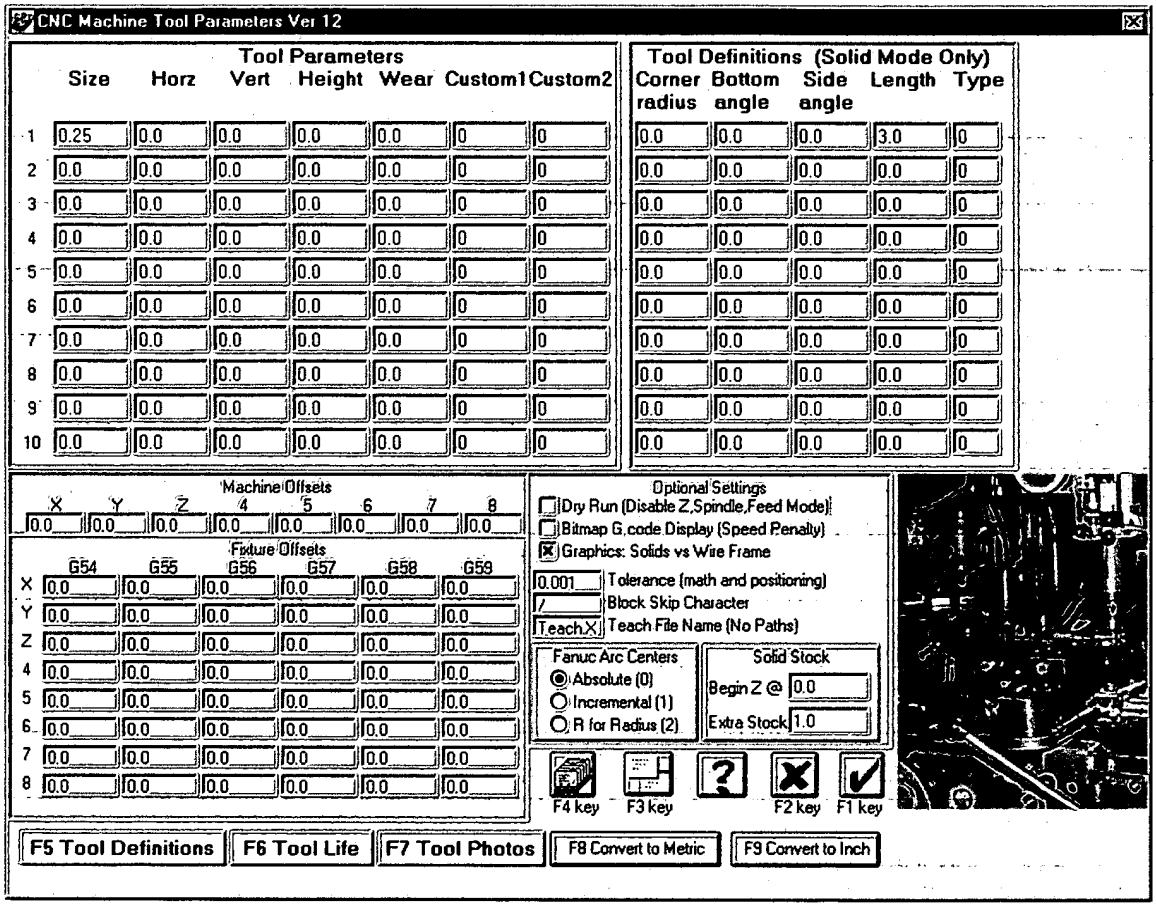


FIG 1.

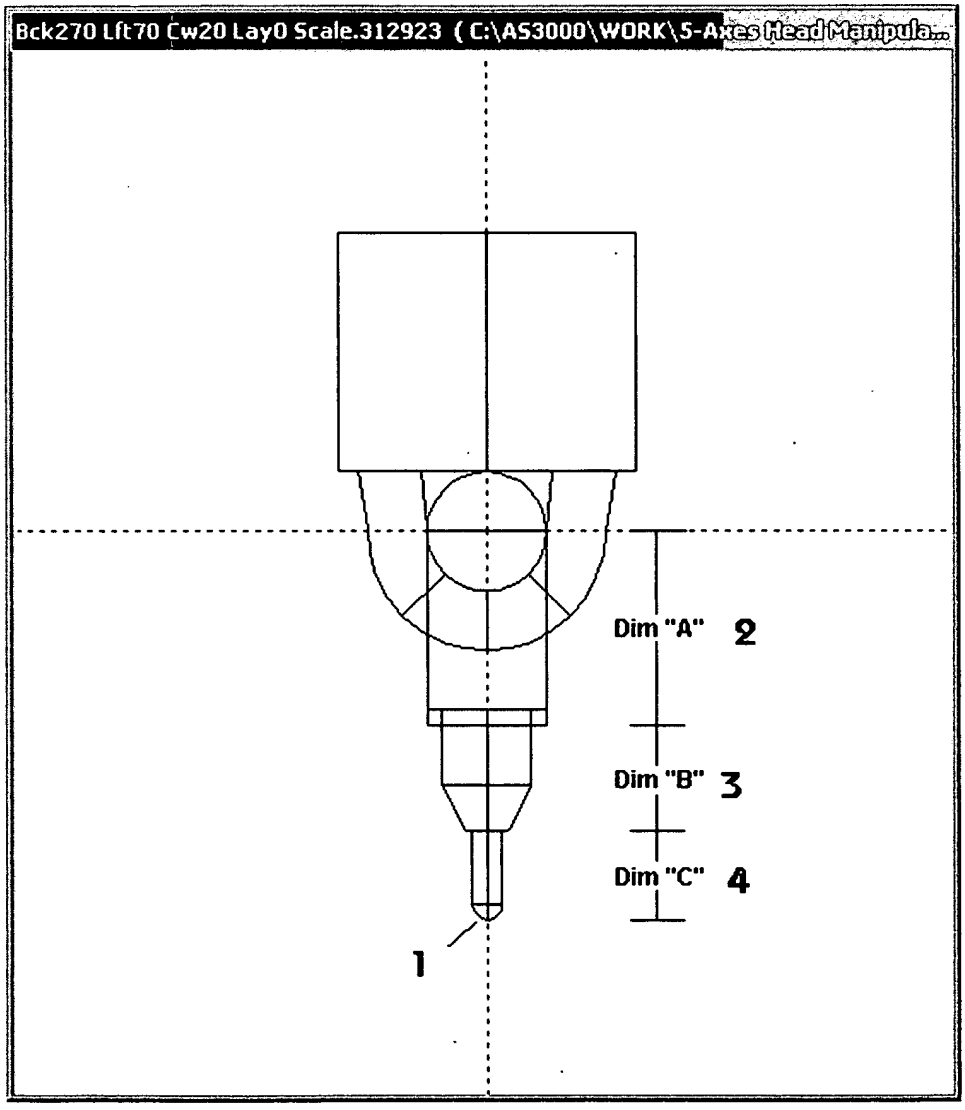


FIG 2.

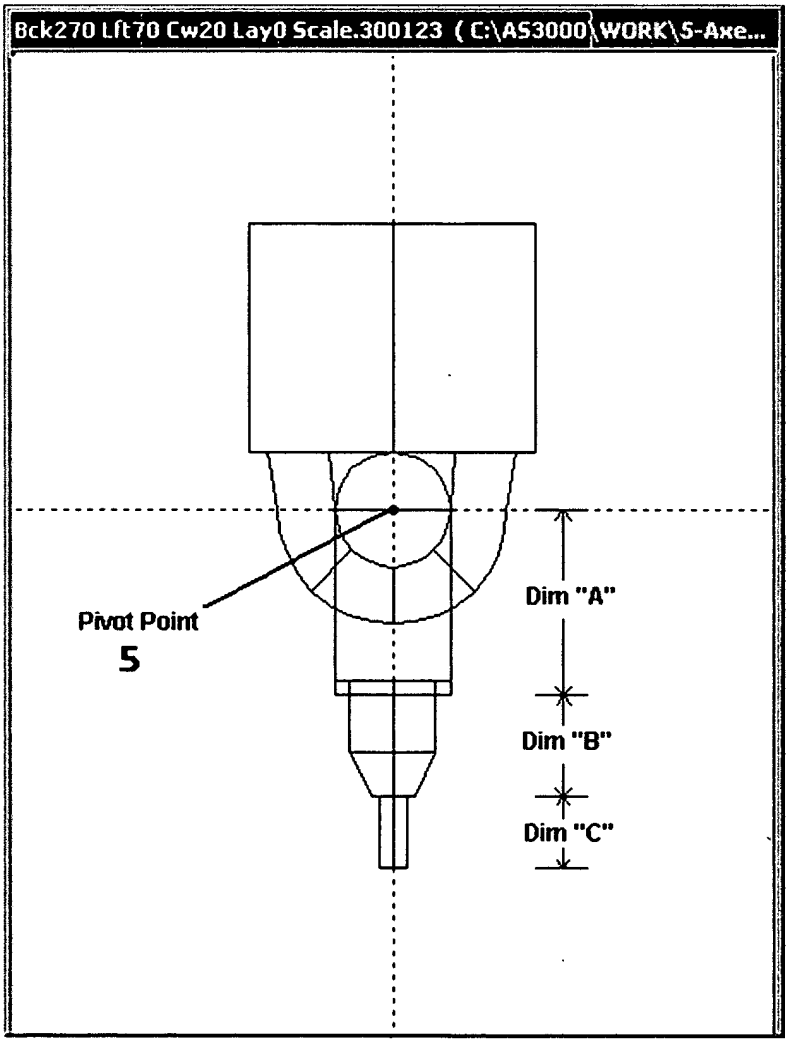


FIG 3.

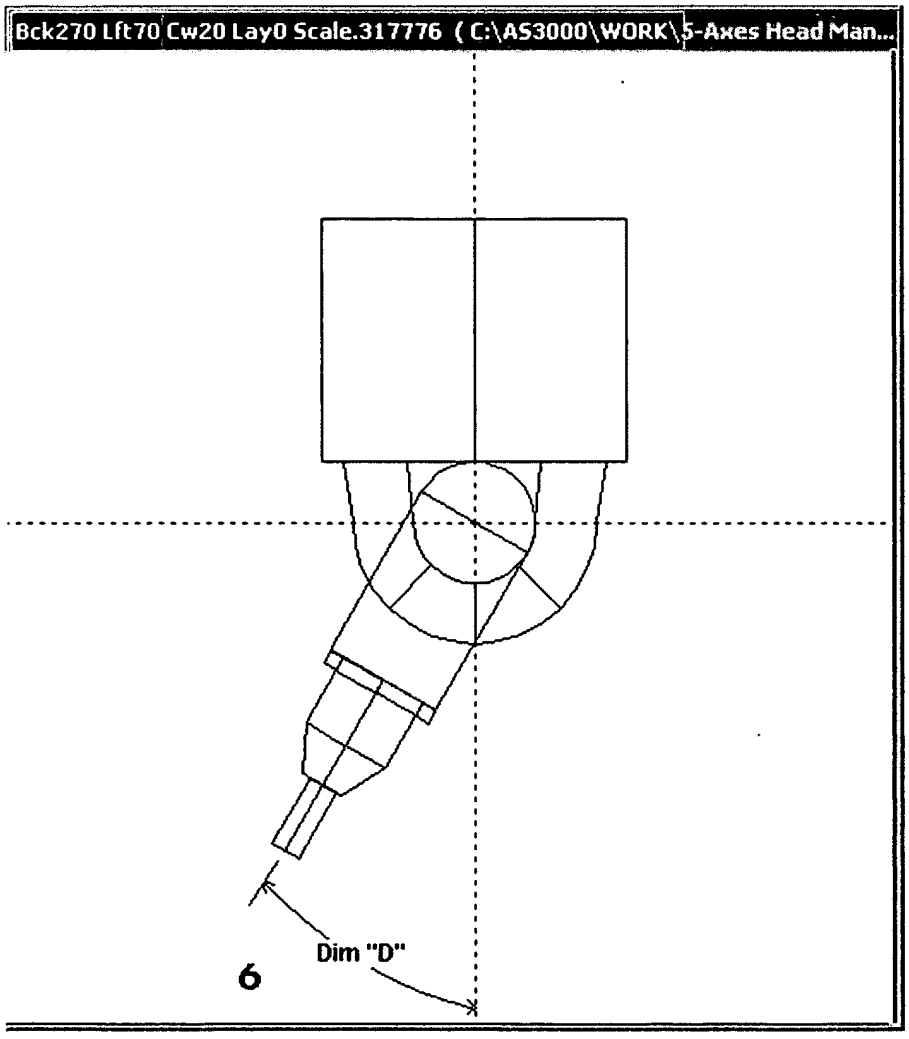
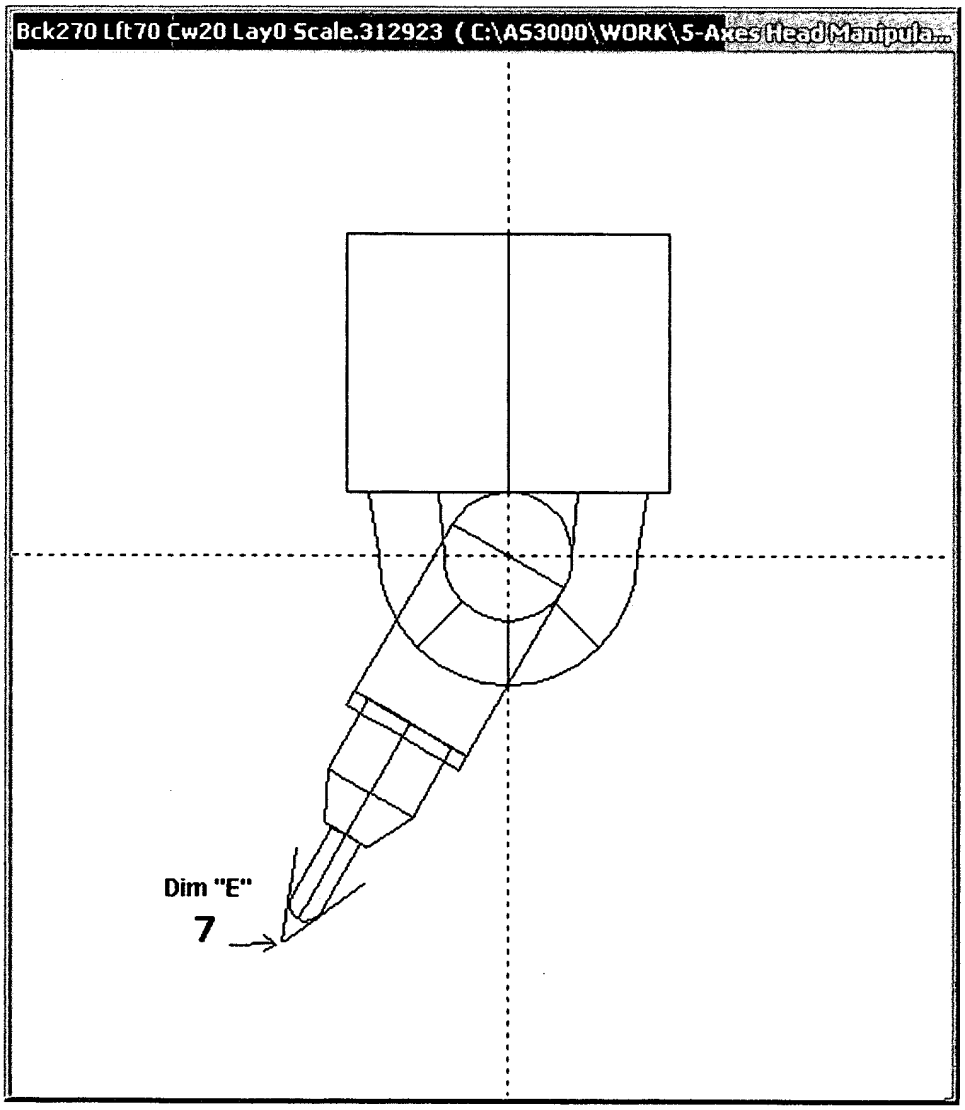


FIG 4.



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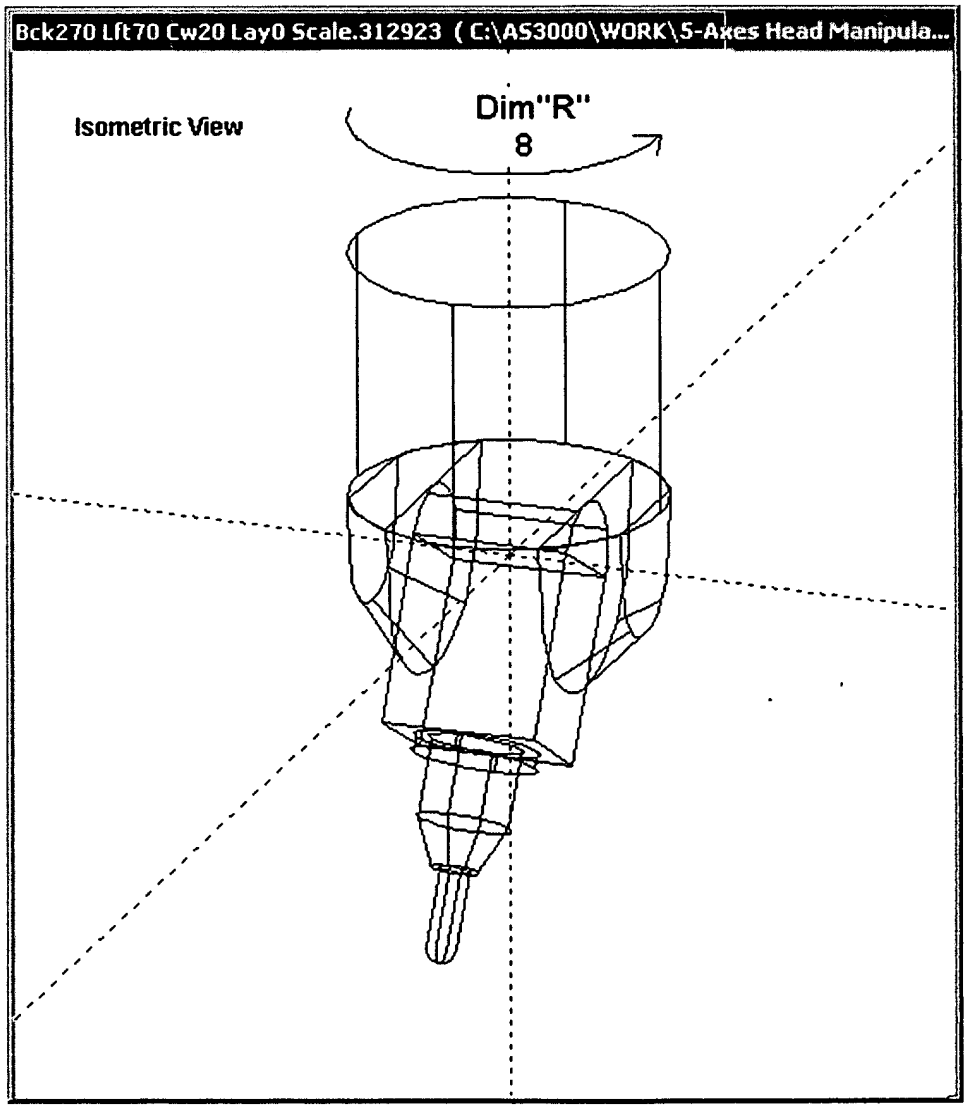
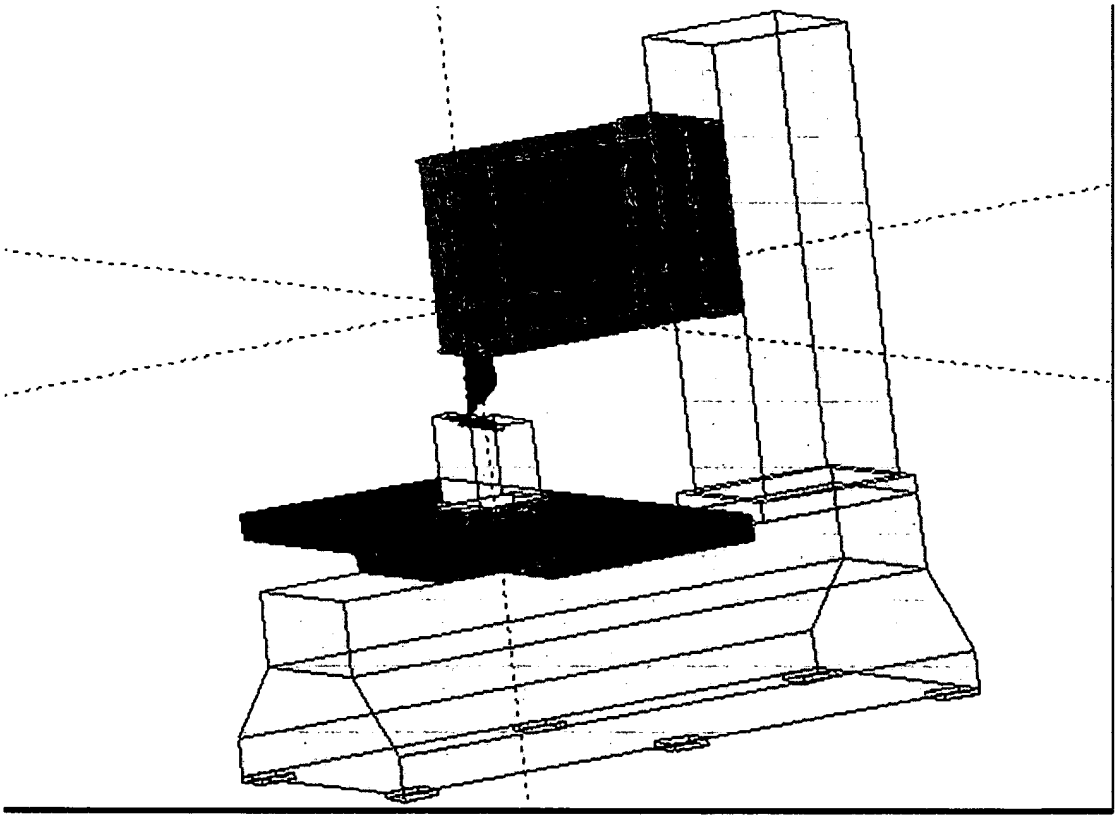


FIG 6.



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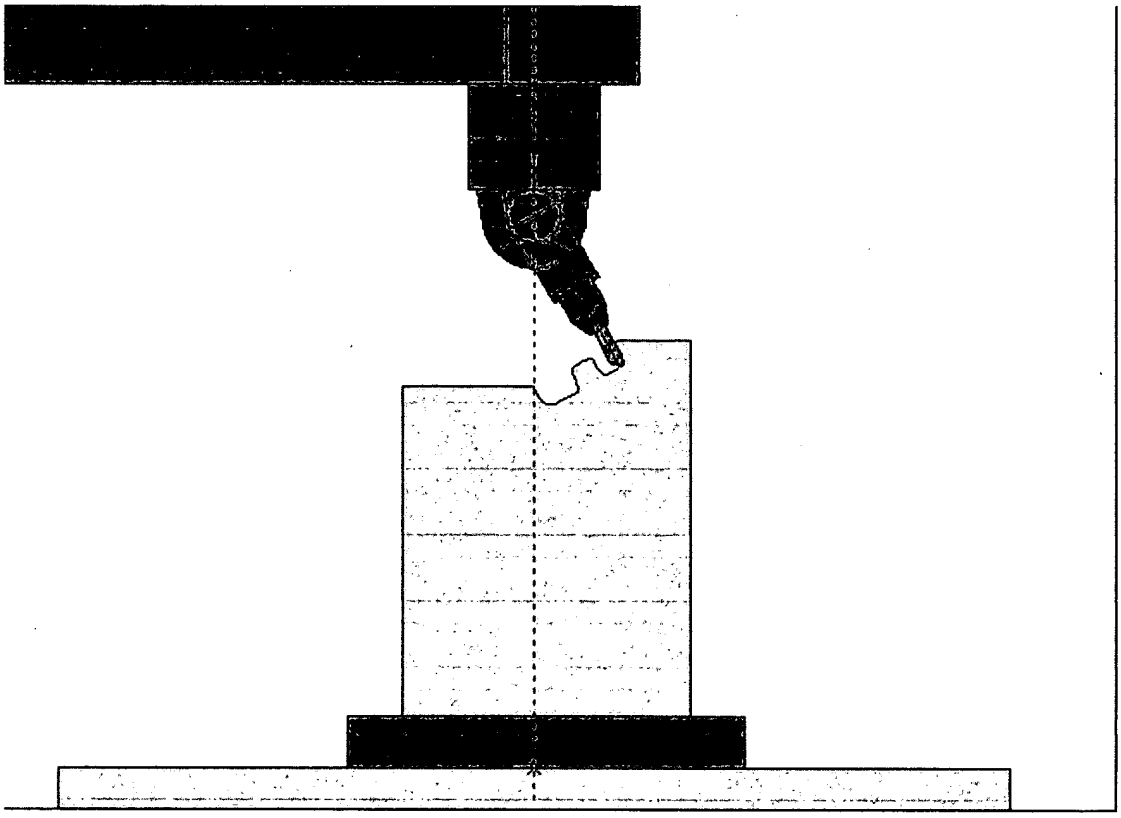

FIG 8.

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%
N10 T01 M6
N20 G90 S200 M3
N30 G0 A270. B0
N40 X0 Y-21. Z0 M8
N50 Z20.5
N60 G1 Y-10.933 Z17.9365 A270. B-30. F10.
N70 Y-3.2465 Z10.75 A270. B-60.
N80 Y0 Z.5 A270. B-90.
N90 Y-3.2465 Z10.75 A90. B-60.
N100 Y-10.933 Z17.9365 A90. B-30.
N110 Y-21. Z20.5 A90. B0
N120 G1 Z0
N130 G0 A0 B0
N140 X0 Y-21. Z0 S200 F10.
N150 G1 Z20.5
N160 G1 Y-10.9332 Z17.9367 A0 B-29.9993 F10.
N170 Y-3.2463 Z10.7498 A0 B-60.0007
N180 Y0 Z.5 A0 B-90.
N190 Y-3.2465 Z10.75 A180. B-60.
N200 Y-10.933 Z17.9365 A180. B-30.
N210 Y-21. Z20.5 A180. B0
N220 Z0
N230 G0 A0 B0
N240 M30
%
```

FIG 9.